

WHAT IS CLAIMED IS:

- 1           1. A plant comprising a recombinant expression cassette, the  
2 expression cassette comprising a promoter and a nucleic acid sequence encoding an  
3 inhibitor of a farnesyltransferase.
- 1           2. A plant of claim 1, wherein said promoter is a promoter  
2 preferentially expressed in guard cells.
- 1           3. A plant of claim 1, wherein said inhibitor is a protein.
- 1           4. A seed containing a nucleic acid construct of claim 1.
- 1           5. A cell or tissue culture containing a nucleic acid construct of claim  
2       1.
- 1           6. A plant regenerated from a cell or tissue culture of claim 5.
- 1           7. A method of inhibiting farnesyltransferase in a plant, comprising  
2 introducing into a plant a recombinant expression cassette comprising a promoter  
3 operably linked to a nucleic acid encoding an inhibitor of farnesyltransferase, whereby  
4 the inhibitor is expressed in said plant.
- 1           8. A method of claim 7, wherein the promoter is specific for  
2 expression in guard cells.
- 1           9. A method of claim 7, wherein the inhibitor is an inhibitor of the  
2 farnesyltransferase alpha-subunit.
- 1           10. A method of claim 7, wherein the inhibitor is an inhibitor of the  
2 farnesyltransferase beta-subunit.
- 1           11. A method of claim 7, wherein said inhibitor is a protein.
- 1           12. A method of claim 7, wherein the recombinant expression cassette  
2 is introduced into the plant by *Agrobacterium*.

1               13.     A method of claim 7, wherein the recombinant expression cassette  
2 is introduced into the plant by contacting the plant with nucleic acid coated- or  
3 containing- microparticles.

1               14.     A method of claim 7, wherein the recombinant expression cassette  
2 is introduced into the plant by sexual cross.

1               15.     A method of inhibiting farnesyltransferase in a plant, comprising  
2 introducing into a plant an isolated nucleic acid complementary to at least 30 nucleotides  
3 of a nucleic acid sequence encoding farnesyltransferase, thereby interfering with the  
4 expression of farnesyltransferase.

1               16.     A method of claim 15, wherein the isolated nucleic acid is  
2 complementary to an alpha-subunit of farnesyltransferase.

1               17.     A method of claim 15, wherein the isolated nucleic acid is  
2 complementary to a beta-subunit of farnesyltransferase.

1               18.     A method of inhibiting farnesyltransferase in a plant, comprising  
2 contacting the plant with an inhibitor of farnesyltransferase, whereby the inhibitor inhibits  
3 farnesyltransferase in the plant.

1               19.     The method of claim 18, wherein irrigation water comprising the  
2 inhibitor contacts the plant.

1               20.     The method of claim 18, wherein the inhibitor contacts the plant  
2 through foliar application.

1               21.     The method of claim 18, wherein the inhibitor is manumycin.

1               22.     The method of claim 18, wherein the inhibitor is  $\alpha$ -  
2 hydroxyfarnesylphosphonic acid.

1               23.     A method of producing a plant with reduced farnesyltransferase  
2 activity, comprising mutating a promoter region of a nucleic acid sequence encoding  
3 farnesyltransferase and selecting mutants with reduced expression of farnesyltransferase.

1                   24     A composition comprising an inhibitor of farnesyltransferase and a  
2 member of the group selected from a pesticide and a fertilizer.